is also of much interest in this country, where, seventeen years ago, the potential value of voluntary sterilization was unanimously recognized by a Departmental Committee, whose recommendations, which circumvent many of the difficulties inherent in the North Carolina Statute, have hitherto been completely ignored.

The book is extremely clearly written; the main statistical facts are set forth in a well-designed appendix of tables, and throughout the human touch is maintained by illustrative case-histories which will interest British readers by reason of how they resemble and, in minor ways, differ from our own type of

case-history. Most important is the author's attitude of critical detachment. Though its conclusions are generally favourable to North Carolina's experiment, her book is in no sense a defence or vindication of the methods she describes. It is a critical though sympathetic evaluation of an attempt to deal with a set of resistant problems common to all civilized countries but which present themselves in cultural conditions differing widely from one another.

A happy link with our *Society* is found in the book's dedication to the memory of Dr. Maurice Newfield, till lately editor of The Eugenics Review. C. P. Blacker.

## OTHER NOTICES

Büchi, E. C. Über die Abhängigkeit der Missbildungen vom Gebäralter. Reprinted from Archiv der Julius Klaus-Stiftung für Vererbungsforschung, Sozialanthropologie und Rassenhygiene, 25, 1/2, 61-5, 1950.

Dr. Büchi has analysed for maternal age the records of no less than 2,619 congenitally malformed infants born in three Copenhagen hospitals between the years 1911 and 1949. For purposes of comparison he has taken the age of every tenth mother of the 168,000 who gave birth to normal children over the same period. The incidence of 1.56 per cent of malformed births agrees with that found by other workers. Maternal age is divided into six five-year periods and the percentage distribution of malformed births is expressed as a ratio of that for normal births. A similar comparison is made for each of the twenty main types of congenital deformity encountered and the results have been examined by the  $\chi^2$  test.

The method of comparison answers the purpose of Dr. Büchi's investigation, but the reviewer feels that it would have been of greater interest to have known the age distribution of normal births, so that the absolute incidence of each deformity in each age period could have been calculated.

Six conditions show a significant increase in incidence with rising maternal age: mongolism, hydrocephaly, anencephaly and spina bifida, congenital heart disease, harelip and cleft palate and

pes equino-varus. There is, however, no indication given as to whether his cases were all "booked" or included emergency admissions. The importance of this has been emphasized by C. O. Carter, who points out that if emergencies are included the relationship between anencephaly and hydrocephaly and maternal age may in part be accounted for by the inclusion of elderly mothers who had planned to have their confinements at home.

Two conditions, hypospadias and undescended testicle, occurred more frequently in the younger than the older age groups. The  $\chi^2$  test indicates that the probabilities of this having occurred by chance are of the order of I in IO and I in 5 respectively, but the shape of the distribution curves suggests that this is not a chance relationship.

Dr. Büchi states that his material shows no clear evidence that malformations are related to parity, but the data on which this conclusion is based are not stated. This is a pity, as Record and McKeown in investigating a large series of congenital malformations of the central nervous system have recently shown that the relationship between anencephaly and spina bifida and maternal age disappears if the parity is held constant.

The paper concludes with a review of the possible causes of the variation in incidence of malformations with maternal age.

J. P. M. TIZARD.